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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,928	09/06/2001	Loick Verger	034299-346	5963

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Thelen Reid & Priest LLP  
P.O. Box 640640  
San Jose, CA 95164-0640

EXAMINER

SUNG, CHRISTINE

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/914,928

Applicant(s)

VERGER ET AL.

Examiner

Christine Sung

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: On page 3, line 3, the phrase radiological image intensifier is abbreviated as "(IIR)" but should be abbreviated as --(RII)--.

Appropriate correction is required.

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Objections***

3. Claim 3 is objected to because of the following informalities: The claim contains a grammatical error as it appears that the claim is missing text after the word "can" on line 24.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the claim states that the evaporation properties of the semiconductor should not exceed a temperature where the devices could be damaged. The claim is ambiguous because it does not specify a general material or temperature range.

6. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner assumes the applicant is referring to feature sizes of the device, when describing "technological system."

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Wei et al. (US Patent 5,435,608).

Wei et al discloses a radiation imaging device comprising a detection matrix made of a semiconducting material comprising of pixels (Fig 1 f, element 110) to convert incident radiation into electric charges (Column 3, lines 55-59) and an electrical charges reading panel comprising several electronic devices (column 3, lines 55-66), each electronic device being integrated by pixel (column 3, lines 63-66), characterized in that each detecting matrix is made of a layer of semiconducting material deposited in vapor phase on the electric charges reading panel (Column 5, line 60-Column 6, line 10).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al. (US Patent 5,435,608).

Regarding claim 3, although Wei et al. does not explicitly state that the specific temperature of the deposition process of the semiconducting material be at a temperature that does not damage the electronic devices, it would have been obvious to one having ordinary skill in the art to have chosen a semiconducting material whose vaporization temperature would not exceed the highest tolerable temperature of the electronic devices, so as to not damage the device.

Regarding claims 5 and 6, the examiner interprets the claims to disclose that the feature sizes of the device are on the order of microns. Therefore, since the feature sizes of the device disclosed by Wei et al. are of the micron order, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the device disclosed by Wei et al., as the specific feature size of the device would only be a matter of design choice for applications such as radiation imaging, where micron sized feature sizes would further enhance imaging quality.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al. (US Patent 5,435,608) in view of Spartiotis (UK Patent Application 2319394).

Wei et al. discloses the limitations set forth in claim 2 but does not specifically disclose the type of semiconducting material used for the detection pixels. Spartiotis discloses in the abstract that CdTe can be used as a semiconducting material. Spartiotis demonstrates that CdTe may be used as a detection material, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the material disclosed by Spartiotis with the invention disclosed by Wei et al., as it is only a matter of design choice. It would have been obvious to one having ordinary skill in the art to have used a material such as CdTe, because, as the Spartiotis reference discloses, CdTe is often used as a conventional detector material because it is used widely for imaging applications.

### ***Conclusion***


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 703-305-0382. The examiner can normally be reached on Monday- Friday 7-4 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 703-308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-0956 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

CS  
May 1, 2003

  
**DAVID PORTA**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**